

Program

9:55-10:00 Opening remarks

Manabu Natsumeda (Brain Research Institute, Niigata University)

10:00-10:20 Oral Session 1

Chair: **Yuko Sekino**

O-1 Translational Imaging of Epileptogenic Plasticity: A Phosphoproteomic-Driven Approach Targeting GAP-43 Phosphorylation in Human Epilepsy

Masayasu Okada (Department of Neurosurgery, Brain Research Institute, Niigata University)

O-2 Persistent Loss of Müller Glia and Retinal Laminal Disorganization Induced by Ionizing Radiation

Takako Yasuda (Department of Chemical and Biological Sciences, Japan Women's University)

10:20-10:50 Oral Session 2

Chair: **Akira Gomi**

O-3 Preclinical Model Development for AAV-Mediated Gene Therapy in Brain Tumors

Satoshi Nakata (Department of Neurosurgery, Gunma University Graduate School of Medicine)

O-4 BET bromodomain inhibition potentiates radiosensitivity in models of H3K27-altered diffuse midline glioma

Jun Watanabe (Department of Neurosurgery, Brain Research Institute, Niigata University)

O-5 NPe6-induced expression of GDF15 as a novel therapeutic target for glioblastomas

Arata Tomiyama (Department of Neurosurgery, National Defense Medical College)

Break

11:05-11:50 Special Lecture 1

Chair: **Shogo Ishiuchi**

SL1 Development of Innovative Immunotherapy to Eliminate Radioresistant Brain Tumor Cells

Satoru Osuka (Department of Neurosurgery, University of Alabama at Birmingham)

12:00-13:00 Luncheon

(第5のがん治療法 光免疫療法－臨床応用への展望－)

Chair: **Nobuyuki Takei**

LS-1 Near-infrared photoimmunotherapy for brain tumors: Novel strategies to overcome major obstacles

Haruka Yamaguchi (Department of Biochemistry, School of Life Dentistry at Niigata, Nippon Dental University)

LS-2 Photoimmunotherapy: From Basic Concepts to Future Applications

Hirofumi Hanaoka (Near InfraRed Photo-ImmunoTherapy Research Institute, Kansai Medical University)

共催：株式会社島津製作所

- P-1 Near-infrared Photoimmunotherapy for Malignant Brain Tumors Using Small Antibody Mimetics and Novel Open Cranial Technique
Haruka Yamaguchi (Department of Biochemistry, School of Life Dentistry at Niigata, Nippon Dental University)
- P-2 The Potential of Near-Infrared Photodynamic Immunotherapy Targeting Somatostatin Receptors
Satoshi Shibuma (Department of Neurosurgery, Brain Research Institute, Niigata University)
- P-3 Exploring the Mechanisms of iVEC-Mediated Regulatory T Cell Recruitment in White Matter Infarction
Shunsuke Nakamura (Department of Neurosurgery, Gunma University Graduate School of Medicine)
- P-4 Radioresistance in *BRAF*-altered pediatric glioma: mechanistic insight from patient-derived glioma cells using BRAF and MEK inhibition
Takeyoshi Eda (Department of Neurosurgery, Brain Research Institute, Niigata University)
- P-5 Somatostatin Receptor–Targeted Near-Infrared Photoimmunotherapy for Meningioma: Validation Using Established Cell Lines and Patient-Derived Tumor Cells
Toru Takino (Department of Neurosurgery, Brain Research Institute, Niigata University)
- P-6 Effects of proton beam irradiation on the survival and dendritic branching of developing cultured hippocampal neurons
Yoshiki Nishikata (Niigata University of Health and Welfare Graduate School)

Break

13:45-14:15 Special Lecture 2

Chair: **Katsuyuki Shirai**

- SL2 SLFN11: A Proven Sensitizer to DNA-Damaging Agents with an Unclear Role in Radiation Response

Junko Murai (Department of Cancer Control, Proteo-Science Center and Department of Biochemistry and Molecular Genetics, Graduate School of Medicine, Ehime University)

14:15-14:45 Oral Session 3

Chair: **Yoshiyuki Suzuki**

- O-6 Radiation-induced cerebral microbleeds and cavernous malformations after radiotherapy for pediatric brain tumors

Akira Gomi (Department of Pediatric Neurosurgery, Jichi Children's Medical Center Tochigi, Jichi Medical University)

- O-7 PREOPERATIVE NEOADJUVANT STEREOTACTIC RADIOSURGERY IN THE TREATMENT OF METASTATIC BRAIN TUMORS

Hiroaki Nagashima (Department of Neurosurgery, Kobe University Graduate School of Medicine)

- O-8 Association Between Tumor Volume, Normal Brain Dose, and Radiation Necrosis After Fractionated Stereotactic Radiotherapy for Brain Metastases

Yukiko Fukuda (Department of Radiology, Jichi Medical University Saitama Medical Center)

14:45-15:15 Oral Session 4

Chair: **Satoshi Nakata**

- O-9 Transcriptomic change of human induced pluripotent stem cells (iPSCs)-derived neuronal cells after particle beam irradiation

Natsuko Kondo (Institute for Integrated Radiation and Nuclear Science, Kyoto University)

- O-10 X-ray irradiation at the early postnatal period impairs female-specific pelvic morphogenesis in mice

Kenji Hanamura (Department of Radiological Technology, Niigata University of Health and Welfare, Gunma University Graduate School of Medicine)

- O-11 Report of three cases of glioblastoma presenting with hippocampal atrophy early phase after starting postoperative chemoradiotherapy.

Yoshiyuki Kitayama (Department of Neurosurgery, University of Tsukuba Hospital)

Break

15:30-16:00 Symposium

Chair: **Kenji Hanamura**

- S-1 Mechanisms of neural circuit reorganization underlying motor recovery after CNS injury

Masaki Ueno (Department of System Pathology for Neurological Disorders, Brain Research Institute, Niigata University)

16:00-16:30

- S-2 Advancing In Vivo Brain Imaging Through Rational Skull Clearing Chemistry

Kazuki Tainaka (Department of System Pathology for Neurological Disorders, Brain Research Institute, Niigata University)

16:30-16:50 **Special Oral Session 5**

Chair: **Takako Yasuda**

SO-1 Synaptic Integrity as a Biomarker of Cognitive Decline: Clinical Evidence from CSF and Plasma Drebrin

Tomoaki Shirao (AlzMed, Inc.)

16:50-17:10

SO-2 Hematopoietic System–Derived Factors Contribute to Hippocampal Dysfunction and Cognitive Decline

Nariko Arimura (Department of Pharmacology, Graduate School of Pharmaceutical Science, Tohoku University)

17:10-17:30 **Oral Session 6**

Chair: **Natsuko Kondo**

O-12 Analysis of NAB2-STAT6 Fusion in Meningeal Solitary Fibrous Tumors

Keita Kawabe (Department of Neurosurgery, Brain Research Institute, Niigata University)

O-13 IL-7R-LYN-Chemokine Receptor Axis Orchestrates Active Spinal-to-Brain Migration of Acute Lymphoblastic Leukemia and Enables Targeted CNS Therapy

Motochika Hamada (Division of Developmental Therapeutics, National Cancer Center)

17:30-17:35 **Next President's address**

Akira Gomi (Jichi University Children's Hospital)

17:35-17:45 **Closing remarks, award ceremony and photo-session**

Manabu Natsumeda (Brain Research Institute, Niigata University)

13:05-13:35 ISRN Board Meeting

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